

### Remarks

Claims 1-15 are pending before entry of this Amendment. The Office has previously restricted the pending claims to embodiments in which substituent X is either O or S. This Office has previously required election of a species, for which dimethyl-[3-(10-oxa-3-thia-benzo[e]naphtha[1,2-h]azulene-2-ylmethoxy)-propyl]-amine has been elected.

By way of this Amendment, claims 1, 2, 3, 5, 6, 14, and 15 have been amended, and claims 4 and 10-12 have been cancelled. No new matter has been added.

### Claim Objections

Claims 1-15 are objected to based on various informalities. The claims have been amended to address the objections. In addition, various typographical and grammatical amendments have been made throughout the amended claims to better conform to U.S. practice.

### Claim Rejections Under 35 USC 112, First Paragraph

Claims 1-15 are rejected under 35 USC 112, first paragraph. The Office alleges that the instant specification does not provide reasonable enablement for the recited solvates of the compound of formula I.

Without addressing the substance of the rejection, the claims have been amended to remove the recitation of solvates. Note, as amended, the claims still encompass methods of treatment with solvated forms (if any) of the compounds of formula I.

Claims 1-15 are rejected under 35 USC 112, first paragraph, as non-enabled for treatment of ailments linked to equilibrium of biogenic amines or neurotransmitters. The Office cites several literature articles in support of the proposition that in vitro inhibition of 5-HT and other receptors is not necessarily evidence of in vivo efficacy. The rejection seems to question the link between binding of 5-HT<sub>2a</sub>, 5-HT<sub>2c</sub>, and  $\sigma$ <sub>1</sub> receptors and the actual treatment of the disorders associated with a disorder of neurochemical equilibrium of biogenic amines or neurotransmitters.

By way of response - Claim 1, and all remaining claims by dependency, have been amended to recite specific conditions such that the claim is no longer directed generally to methods of treating ailments caused by a disorder of neurochemical equilibrium of biogenic amines or neurotransmitters. Thus, the claim is limited to methods of treating specific conditions to such a disorder.

Further, it is noted that Applicants' specification contains direct evidence of the efficacy of compounds of formula I in vivo, e.g. in mice and rats (see specification pp. 26-28). Since in vivo efficacy of the compounds has been explicitly demonstrated, the literature articles provided by the Office to support the uncertainty of in vivo efficacy of such compounds have been rendered irrelevant.

As shown above, the recited compounds have binding affinity for one or more of the 5-HT<sub>2a</sub>, 5-HT<sub>2c</sub>, and  $\sigma$ <sub>1</sub> receptors, and have activity in vivo. One of skill in the art would suspect that compounds having such receptor binding and such in vivo availability would be effective in treating the various conditions recited in claim 1 without any additional undue experimentation required for enablement for the claimed method of treatment.

Claim 4 is rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. Claim 4 has been cancelled.

#### Claim Rejections Under 35 USC 112, Second Paragraph

Claims 1-15 are rejected under 35 USC 112, second paragraph, as being indefinite. Claim 1, and the remaining claims by dependency, have been rendered definite by amending the claim to recite specific conditions being treated.

#### "Double Patenting" Objections

Claim 7 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 6. Comparing the claims, claim 6 generally recites binding

affinity to serotonin 5-HT<sub>2a</sub> and 5-HT<sub>2c</sub> receptors, while claim 7 recites binding affinity to selected serotonin receptors with a specified binding efficacy. In regards to plural claiming, MPEP 706.03(k) states that "court decisions have confirmed applicant's right to restate (i.e., by plural claiming) the invention in a reasonable number of ways. Indeed, a mere difference in scope between claims has been held to be enough." Here, the claims are clearly of different scope, irregardless if the difference in scope may be deemed functional for patentability purposes. Thus, the prohibition of plural claiming does not apply.

The same argument (above) holds true for claims 8 and 9 in comparison to claim 1. Without comment to the purported merely functional language of the claims, plural claiming is avoided by difference in claim scope, not by analysis of the patentable weight of the various recitations.

#### Conclusion

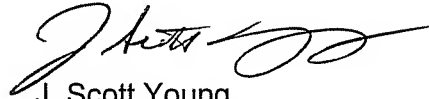
In conclusion, the various claim objections and rejections have been addressed and overcome by amendment and the preceding remarks. Applicants assert that the application is in condition for allowance and respectfully request such action.

Applicants believe that no fees are due in connection with the filing of this paper other than those specifically authorized herewith. However, should any other fees be deemed necessary to effect the timely filing of this paper, the Commissioner is hereby authorized to charge such fees to Deposit

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Account No. 07-1392. The Examiner is invited to contact the undersigned at  
(919) 483-8160, to discuss this case, if desired.

Respectfully submitted,



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